IN THE CLAIMS

This listing of claims replaces all prior versions, and listings, in this application.

23. (previously presented) A fusion protein characterized in that it comprises the amino acid sequences of different allergens belonging to the non-specific Lipid Transfer Protein (ns-LTPs) family, in that said sequences lack one or more of the four disulphide bridges present in the sequences of the wild type allergens, at least one in the amino terminal region comprised between amino acid residues 1 and 30 and in that said sequences maintain essentially the same length as the sequences of wild type allergens.

24. (previously presented) The fusion protein according to claim 23, characterized in that the amino acid sequence of each of the allergens is independently mutated by elimination or substitution of one or more cysteine residues involved in the formation of a disulphide bridge.

25. (previously presented) The fusion protein according to claim 23, characterized in that it comprises allergens Parj1 and Parj2 of the *Parietaria judaica* species.

26. (previously presented) The fusion protein according to claim 25, characterized in that the amino acid sequence of each of the allergens is independently mutated by elimination or substitution of one or more cysteine residues in positions corresponding to the positions 4, 14, 29, 30, 50, 52, 75 and 91 of the amino acid sequence of Parj1 and/or Parj2 allergen.

27. (previously presented) The fusion protein according to claim 26, characterized in that it contains amino acid sequences of Parj1 and Parj2 allergens, both independently modified by substitution of cysteine residues with Asn, Ser, Thr, Ile, Met, Gly, Ala, Val, Gln or Leu residues in positions 29 and 30 or 4, 29 and 30 or 29, 30, 50, 52.

28. (previously presented) The fusion protein according to claim 27, comprising the amino acid sequence SEQ ID NO: 4.

29. (previously presented) A nucleotide sequence comprising the DNA coding for the fusion protein according to claim 25.

30. (previously presented) The nucleotide sequence according to claim 29 comprising the nucleotide sequence SEQ ID NO: 3.

31. (previously presented) An expression or cloning system comprising the nucleotide sequence according to claim 30 flanked by suitable sequences for controlling, promoting and regulating the expression.

32. (previously presented) A host cell transformed by means of the expression or cloning system according to claim 31.

33. (currently amended) A method for diagnostic or therapeutic treatment method *in vivo* and/or *in vitro* using the [[The]] fusion protein according to claim 25, the method comprising administration of said protein to a patient or cell ~~for use in a diagnostic or therapeutic treatment method *in vivo* and/or *in vitro*~~.

34. (currently amended) A method for specific immunotherapy (SIT) treatment of allergies using the [[The]] fusion protein according to claim 33, the method comprising administration to a patient of said protein ~~for use~~ as a hypoallergenic immunologic agent in the specific immunotherapy (SIT) treatment of allergies.

35. (currently amended) A method for treatment of rhinitis, conjunctivitis, urticaria, angioedema, eczema, dermatitides, asthma, or anaphylactic shock using the [[The]] fusion protein according to claim 33, the method comprising administration to a patient of said protein ~~for use~~ in treatment of rhinitis, conjunctivitis, urticaria, angioedema,

eczema, dermatitides, asthma, or anaphylactic shock.

36. (currently amended) A method for preparation of a DNA vaccine using the [[The]] fusion protein according to claim 33, the method comprising mixing said protein in ~~for use for preparation of~~ a DNA vaccine.

37. (previously presented) A pharmaceutical composition comprising the fusion protein according to claim 25 and a pharmaceutically acceptable excipient.

38. (previously presented) The pharmaceutical composition according to claim 37 in the form of a solution, suspension, emulsion, cream, ointment or implant.

39. (currently amended) The pharmaceutical composition according to claim 37, for parenteral, subcutaneous, intramuscular, intravenous, topical, or oral administration or for subcutaneous implantation.

40. (currently amended) A method for [[of]] preparation of the fusion protein according to claim 25, the method comprising producing ~~characterized in that~~ suitably mutated amino acid sequences of different allergens ~~are produced~~ and linking them ~~linked~~ directly or via a spacer for chemical synthesis or by expression, in the form of fusion protein, in a genetically modified host cell.

41. (currently amended) The method for [[of]] preparation according to claim 40, further comprising transforming ~~characterized in that~~ a host cell ~~is transformed~~ with an expression vector comprising DNA coding for the amino acid sequences in fused form, which is mutated via site-specific mutagenesis in one or more codons coding for one or more cysteine residues.

42. (currently amended) The method for [[of]] preparation according to claim 41, characterized in that one or more cysteine residues are substituted with Asn, Ser, Thr,

Ile, Met, Gly, Ala, Val, Gln or Leu residues.

43. (currently amended) The method for [[of]] preparation according to claim 40, characterized in that one or more cysteine residues in position 29 and 30; 4, 29 and 30; or 29, 30, 50 and 52 are substituted with alanine or serine residues.

44. (currently amended) A [[The]] method for [[of]] preparation of the ~~a~~ pharmaceutical composition according to claim 37, the method comprising mixing said ~~characterized in that the heterodimer~~ protein ~~is mixed~~ in an immunologically active amount with [[to]] a pharmaceutically acceptable excipient.